

WHAT IS CLAIMED IS:

1. A gas discharge lamp, comprising:
a base configured to receive electrical power from a power source;
a high frequency ballast electrically connected to the base and configured to convert the electrical power to a high frequency AC waveform for driving a gas discharge tube;
the gas discharge tube configured to receive the high frequency AC waveform and emit UV light by passing the high frequency AC waveform through a mixture of gases contained within the gas discharge tube and to emit UV photons in response; and
a visible light emitting surface (VLES) having a glass envelope of different geometry than the gas discharge tube and a phosphor coating placed on the inside of the glass envelope, the glass envelope sealing a volume around the gas discharge tube that is at least partially evacuated.
2. The gas discharge lamp of claim 1, comprising a DC blocking capacitor configured to block DC current from the high frequency ballast from reaching the gas discharge tube.
3. The gas discharge lamp of claim 1, wherein the base is a standard candelabra base.
4. The gas discharge lamp of claim 1, wherein the high frequency AC waveform is in a frequency range of about 100 KHz to about 450 KHz.
5. The gas discharge lamp of claim 1, wherein the gas discharge tube includes electrodes for receiving the high frequency AC waveform from the gas discharge tube, the electrodes being one of a cold cathode and a hot cathode type.
6. The gas discharge lamp of claim 1, wherein the gas discharge tube comprises UV transparent material.

7. The gas discharge lamp of claim 1, wherein the mixture of gases includes at least one of argon and xenon.

8. The gas discharge lamp of claim 1, wherein a geometry of the gas discharge tube is one of helical, cylindrical, spiral, beehive, and multiple U tubes.

9. The gas discharge lamp of claim 1, wherein the phosphor coating on the inside of the glass envelope is configured to convert UV photons emitted by the gas discharge tube into visible light photons.

10. The gas discharge lamp of claim 9, wherein the glass envelope is configured to block UV photons that are not converted by the phosphor coating.

11. The gas discharge lamp of claim 1, wherein the VLES is configured for use as a sign.